

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of filtering an image with bar-shaped structures by means of Gabor filters, which are formed in the spatial domain by a two-dimensional Gaussian bell-shaped curve on which a cosine function is superimposed in a main direction, characterized in that;

an image is captured by a sensor and buffered in a buffer,
using a program that is stored in a program memory, the image, which is buffered in the buffer, is divided into a plurality of original, non-overlapping tiles of a known side length,

using the program that is stored in the program memory, a predominant direction of the bar-shaped structures is determined for each tile and the filtration is undertaken in such a way that one tile at a time is rotated until the predominant direction lies at right angles to the main direction of the Gabor filter,

using the program that is stored in the program memory, one filtration takes place in the main direction and another filtration takes place at right angles to this; wherein in order to filter a tile of said known side length, that does not overlap with adjacent tiles, a larger tile is formed that partially overlaps the adjacent tiles and is of a size having a diagonal of at least double the known side length of the original tile, and after the rotation, a block having a diagonal ~~of~~ corresponding to the larger tile block is buffered and filtration of the buffered block is performed in a square having a side length corresponding to at least a diagonal of said original tile; and

using the program that is stored in the program memory, the filtered tile is rotated back again to obtain a filtered tile of said known side length.

2. (original) A method as claimed in claim 1, characterized in that, tile by tile, for one of

the filtrations, a cosine oscillation with a frequency equal to the frequency of the structure at right angles to the predominant direction is derived, and in that the cosine oscillation is modulated with a Gaussian bell-shaped curve.

3. (original) A method as claimed in claim 1, characterized in that, tile by tile, for the other of the filtrations, the width of the Gaussian bell-shaped curve depends on the change in direction of the structures on the tile.

4. (previously presented) A method as claimed in claim 2 characterized in that the width of the Gaussian bell-shaped curve in the direction of the cosine oscillation is set to depend on the change in frequency on the tile.

5. (previously presented) A method as claimed in claim 1 characterized in that selected angles, which are implemented in a particular program, are defined for the rotation, and then one of the defined angles that most closely accords with the rotation that is necessary per se is used for application of the filtration.

6. (previously presented) A method as claimed in claim 1 characterized in that during the rotation, low-pass filtration takes place through interpolation.

7. (previously presented) A method as claimed in claim 1, characterized in that binarization takes place simultaneously during the back-rotation.

8. (canceled)

9. (previously presented) A method as claimed in claim 1, characterized in that entries (values) lying below a threshold value and located at the edges of the one-dimensional filters are not taken into account during the filtration.

10. (new) A program memory storing a program that implements a method of filtering an image with bar-shaped structures by means of Gabor filters, wherein the Gabor filters are

formed in the spatial domain by a two-dimensional Gaussian bell-shaped curve on which a cosine function is superimposed in a main direction, characterized in that;

the image is divided into a plurality of original, non-overlapping tiles of a known side length,

a predominant direction of the bar-shaped structures is determined for each tile and the filtration is undertaken in such a way that one tile at a time is rotated until the predominant direction lies at right angles to the main direction of the Gabor filter,

one filtration takes place in the main direction and another filtration takes place at right angles to this; wherein in order to filter a tile of said known side length, that does not overlap with adjacent tiles, a larger tile is formed that partially overlaps the adjacent tiles and is of a size having a diagonal of at least double the known side length of the original tile, and after the rotation, a block having a diagonal corresponding to the larger tile is buffered and filtration of the buffered block is performed in a square having a side length corresponding to at least a diagonal of said original tile; and

the filtered tile is rotated back again to obtain a filtered tile of said known side length.

11. (new) The program memory as claimed in claim 10, characterized in that, tile by tile, for one of the filtrations, a cosine oscillation with a frequency equal to the frequency of the structure at right angles to the predominant direction is derived, and in that the cosine oscillation is modulated with a Gaussian bell-shaped curve.

12. (new) The program memory as claimed in claim 10, characterized in that, tile by tile, for the other of the filtrations, the width of the Gaussian bell-shaped curve depends on the change in direction of the structures on the tile.

13. (new) The program memory as claimed in claim 11 characterized in that the width of the Gaussian bell-shaped curve in the direction of the cosine oscillation is set to depend on the change in frequency on the tile.

14. (new) The program memory as claimed in claim 10 characterized in that selected

angles, which are implemented in a particular program, are defined for the rotation, and then one of the defined angles that most closely accords with the rotation that is necessary per se is used for application of the filtration.

15. (new) The program memory as claimed in claim 10 characterized in that during the rotation, low-pass filtration takes place through interpolation.

16. (new) The program memory as claimed in claim 10, characterized in that binarization takes place simultaneously during the back-rotation.

17. (new) The program memory as claimed in claim 10, characterized in that entries (values) lying below a threshold value and located at the edges of the one-dimensional filters are not taken into account during the filtration.